



Urban Development Standards:

A detailed user survey



September 1979



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A detailed user survey

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Office of the Minister Ministry of Housing

Hearst Block Queen's Park Toronto Ontario M7A 2K5 416/965-6456

September, 1979

Dear Sir/Madam:

I am pleased to enclose a report which reviews rather thoroughly innovative development standards which are currently being used by municipalities in Ontario. "Urban Development Standards: A Detailed User Survey" was undertaken in 1978 in response to several requests, mainly from municipalities, for further information on actual subdivision developments employing reduced and innovative design standards similar to those proposed in Urban Development Standards - A Demonstration of the Potential for Reducing Costs, which the Ministry published in April 1976.

A majority of the larger municipalities have already made or are currently considering some modifications to their normal development standards. I wish to encourage them and others to continue reviewing their standards with the objective of adopting those proposed in Urban Development Standards which they feel are suitable for their municipality.

Yours sincerely

Claude F. Bennett

Minister

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I INTRODUCTION

The Ministry of Housing published the report on Urban Development Standards in April, 1976. It illustrated how reductions and modifications to certain subdivision design standards could signficantly lower housing costs.

Since the publication of the Report there have been several requests, mainly from municipalities, for further information on actual subdivision developments employing the reduced and innovative design standards proposed in the Report. This Survey was undertaken in response to these requests and to provide a general overview of current subdivision design standards in the province.

The Survey was done by questionnaire and covers the larger municipalities in the province where a signficant amount of subdivision development is either going on or can be anticipated. The details of the Survey are described more fully in the next section on Survey Technique.

It is important to note that the Survey is not meant to be an exhaustive survey of development standards in the province. Its primary purpose is to help disseminate information regarding new trends in design standards among interested groups, especially municipalities which may be contemplating introducing reduced or innovative standards. Undoubtedly, some particular developments and areas where innovative standards exist have been missed in the Survey and we would appreciate receiving information on any such developments and areas. However, it is hoped that sufficient information is presented in the following summaries and tables to provide a fair representation of the "state of the art" in the province.

A final word of caution must be made regarding the information presented in the tables. These have been prepared essentially using the information as it was received, with limited follow-up work to clarify some responses which were confusing or not clear. In some instances, however, some minor adjustments were made to the information received to keep the information consistant for comparison purposes. Because of the above qualifiers, specific concerns regarding any particular

development or standards should be verified with the individual municipality involved.

II SURVEY TECHNIQUE

In order to gather information as completely as possible via a questionnaire technique, it was decided to survey only those municipalities which had both a professional planning director and a professional municipal engineer. As well, this was further refined to include only those of the above category of municipalities which were either already experiencing or expecting to experience a significant amount of subdivision development. This is discussed in greater detail later in this section. A total of 41 municipalities qualified in these two categories, varying in population from 25,000 to 500,000.

Two questionnaires were sent to each municipality surveyed - one for site planning standards and one for engineering standards. The questionnaires in both cases were divided into three parts:

- (i) existing basic "conventional" site planning and engineering standards which are applicable to a majority of new subdivision developments,
- (ii) existing "innovative" site planning and engineering standards for several subdivision developments and,
- (iii) proposed "innovative" site planning
 and engineering standards.

"Innovative" standards were considered to be those which were standards similar to those proposed in the Urban Development Standards study.

The questionnaires focussed on the key standards as identified in the Urban Development Standards study. The key standards for the site planning standards survey were lot sizes, setbacks and the use of the zero lot line concept. For the engineering standards survey, the key standards were the storm drainage system, the method of making service connections to individual lots, and road allowance and pavement widths. The two questionnaires are included as Appendices I and II.

By coincidence, there were 33 replies received to both the site planning and the engineering standards questionnaires, although not necessarily from the same municipalities. This represents an 80% return rate.

Municipalities which responded to each questionnaire are as follows:

SITE PLANNING STANDARDS QUESTIONNAIRE RESPONDENTS

Barrie Niagara Falls

Belleville North Bay
Brampton Oakville
Brantford Orillia
Burlington Oshawa

Caledon (Bolton) Richmond Hill Cambridge St. Catharines

Chatham Sarnia

Cornwall Sault Ste. Marie

Etobicoke Scarborough
Gloucester Sudbury
Timmins

Hamilton Timmins
Kitchener Vaughan
Kingston Waterloo
London Whitby

Markham Windsor

Nepean

North Bay

ENGINEERING STANDARDS QUESTIONNAIRE RESPONDENTS

Barrie Oakville
Belleville Orillia
Brantford Oshawa

Burlington Peterborough
Cambridge Richmond Hill
Chatham St. Catharines

Gloucester St. Thomas

Guelph Sarnia

Kitchener Sault Ste. Marie

Kingston Thunder Bay

London Timmins

Markham Vaughan

Milton Waterloo

Mississauga Welland

Mississauga Welland
Nepean Whitby

Niagara Falls Windsor

In order to determine the significance of the municipalities surveyed in terms of overall subdivision development in the province, an analysis was made of subdivision approvals for the years 1976 to 1978, inclusive. During this period, the 33 municipalities which responded to the site planning questionnaire accounted for 43% of all units receiving draft approval and 52% of all units receiving final approval. More specifically, the breakdown is as follows:

Type of Unit	Type of Approval	Municipalities Surveyed	Total Province	96
Single Family	Draft Approved	24,525	71,725	34
	Final Approved	27,639	64,990	42
Semi-Detached	Draft Approved	12,867	26,237	49
	Final Approved	14,077	21,587	65
Townhouse	Draft Approved	12,937	23,808	54
	Final Approved	19,536	30,848	65
Apartment	Draft Approved	11,157	15,895	53
	Final Approved	21,107	28,443	51

It is apparent from these figures that the municipalities surveyed account for a significant amount of residential development in the province.

ANALYSIS OF SITE PLANNING STANDARDS USER SURVEY DATA

(A) Existing 'Conventional' Site Planning Standards

A section dealing with "conventional" site planning standards was included in the Survey to provide a base reference for comparison with any reduced or innovative standards which a municipality might have permitted or is considering. As well, it was felt that it may be of interest to compare the various conventional standards among municipalities. Consequently, no analysis has been made of this section of the questionnaire. The results of this section of the questionnaire are contained in Tables 1 and 2.

(B) Existing 'Innovative' Developments

This section of the questionnaire was concerned with obtaining a list of existing subdivision developments which employ site planning standards that were reduced or different from the conventional standards of the municipality concerned. Included in this category are subdivisions which are already completed, under construction or have received final approval.

An examination of the returned questionnaires indicated that "innovative" projects could be divided into major and minor categories relative to the scale of reduction or change in standards. Major "innovative" developments include those which incorporate reduced or altered standards to the level proposed in the Urban Development Standards study. Minor "innovative" developments include those with smaller but, nevertheless, signficant reductions. Table 3 lists these developments along with the key features of each subdivision and its current status as of September 1978.

Of the 33 municipalities responding to the Survey, 9 (27%) indicated that they had already permitted or had approved subdivisions employing <u>major</u> reductions in site planning standards. All but one of the projects listed employed the zero lot line concept.

EXISTING CONVENTIONAL SITE PLANNING STANDARDS MINIMUM LOT DIMENSIONS AND AREAS

		Frontage	age (ft.	() S+rpp+		Depth	h (ft.	2+200+	A	Area (sq.	. ft.)	4404
	Single	Semi	Link	Town- House	Single	Semi	Link	Town- House	Single	Semi	Link	Town- House
URBAN DEVELOPMENT* STANDARDS												
- Metropolitan	30	30	28.5	18	80	80	80	80	2400	2400	2360	1520
- Ontario	30	26.5	26	21	100	100	100	100	3000	2650	2600	2100
BARRIE	40	30	23	23	110	120	110	110	4400	3600	2530	2530
BELLEVILLE	20	30	ı	t	100	120	ı	1	2000	3600	1	2500
BRAMPTON	50	30	25	20	100	100	100	100	2000	3000	2500	2000
BRANTFORD	50	30	ı	1	1	ı	1	ı	2000	3000	ı	ı
BURLINGTON	45	32	ι	30	ı	ı	ı	100	2000	3200	1	3000
CALEDON	50	35	1	1	140	1	1	ι	7000	4500	ı	1
CAMBRIDGE	40	30	1	18	100	100	ı	1	4000	3000	1	2200
CHATHAM	45	25	1	15.5	1	1	ı	ı	2000	3000	1	2500
CORNWALL	50	30	26	26	1	ı	ı	ı	2000	3650	2000	2000
ETOBICOKE	40	30	ı	ı	125	125	ı	1	2000	3600	1	ı
GLOUCESTER	50	32.5	ı	30	100	100	ı	100	2000	3200	1	3000
HAMILTON	40	30	30	20	1	ı	ı	ı	4000	3000	3000	2000
KITCHENER	45	25	1	20	112	112	ı	100	2000	3000	1	2000
* (Ref: Exhibit 2.9 Urban Development Standards)	rban Deve	lopment	Standa	ırds)								

		Fron	Frontage (ft.			Del	Depth (ft.	()	V	Area (sq.	. ft.)	Street
	Single	Semi	Link	Street Town- House	Single	Semi	Link	Town- House	Single	Semi	Link	Town- House
KINGSTON	40	25	9	1	ı	ı	ı	1	0009	4000	1	ı
NO CON CO	40	30	ı	20	100	100	1	100	4000	3000	1	2000
MARKHAM	09	3.5	ı	20	110	110	i	100	0099	3850	1	2000
NEPEAN	65	35	1	20	100	100	1	100	6500	3500	1	2000
NIAGARA FALLS	40	30	1	22	ı	ı	ı	1	4000	3250	ı	2700
NORTH BAY	4.5 50 60	30	ı	25	100	100	100	100	4500 5000 6000	3000	2500	2500
OAKVILLE	50	35	1	i	100	115	ı	100	2000	4000	1	3000
ORILLIA	R1 60 R2 50	35	35	1	i	1	1	ı	0009	3500	3000	2000
OSHAWA	40	27.5	26	20	120	109	ı	ı	2000	3000	2340	1800
RICHMOND HILL	20-60	30-34	ı	20	125	125	1	125	6250-7510	3750	1	2500
ST. CATHARINES	50	30	i	18	100	100	1	100	2000	3000	ı	1800
SARNIA	50	30	18	18	ı	1	ı	ı	2000	3000	ŧ	2400
SAULT STE. MARIE	20	30	1	1	120	116	ŧ	ı	0009	3500	ı	ı
SCARBOROUGH	30-60	25-50	25	20	110	110	110	110	ı	1	1	ı
SUDBURY	20	30	1	1	100	100	t	ı	2000	3000	2500	2000
TIMMINS	40-50	30	ı	25	1	ı	1	1	2000	4000	1	2500
VAUGHAN	50	35	ı	ı	ı	ı	ı	1	0009	4200	ı	i
WATERLOO	40	30	1	24	100	100	100	105	4000	3000	i	2400
NAT I HM	40	30	31-32	21	100	100	100	100	2000	3000	3100-3200	0 2100
WINDSOR	200	30	1	23	100	100	ı	100	2000	3000	1	2300
and the second												

MINIMUM YARD DISTANCE FROM LOT LINE TO DWELLING EXISTING CONVENTIONAL SITE PLANNING STANDARDS TABLE 2

Zero	side yard permitted yes,no		yes	yes	ou	ou	Or	no	ou	Ou	yes
Side Yard (ft.)	Flankage side yard on corner lot		4 + 2*+	12	25	10	12	10	10	20	12.5
Side	Internal side yards (both sides) on		4 + 2*	4	8&4 or 3 both sides if attached garage	4 & 6	3 (both sides combined must be 20% of lot width)	4 & 6	S & UI	10% of lot frontage to max. of 5 each side	4&4 with & 4&8 without atta- ched garage
(0	Lot backing onto an arterial		65	25 (27 in some cases)	N/A	50-75	nax. of 30)	750	25	30	25
Rear Yard (ft.)	To living room		25	25	25	25	20% of lot depth (to max. of 30)	30	25	30	25
Re	room (other than living room)		18	25	25	25	20% of lot	30	25	30	25
	To garage or carport (without sidewalk)		14	25	25	23	30	20	30	20	25
Front Yard (ft.)	To garage or carport (with sidewalk)		20	25	25	23	30	20	30	20	25
Fron	To living		15	25	25	20	30	20	30	20	25
	To habitable room (other than living	PMENT**	10	25	25	20	30	20	30	20	25
	TOC	URBAN DEVELOPMENT** STANDARDS	- Metro- politan & Ontario	BARRIE	BELLEVILLE	BRAMPTON	BRANTFORD	BURL, INCTON	CALEDON	CAMBRIDGE	CHATHAM

^{*} For each floor or partial floor above the first. + House to be no closer than 20 from corner lot point to maintain corner vision for traffic. ** (Ref: Exhibit 2.10 Urban Development Standards)

This continue This continu			Fron	Front Yard (ft.)		Registration Registration	Rear Yard (ft.)		Side Yard (ft.)		Zero
E 25 25 25 25 25 25 25 25 25 25 25 25 25		To habitable room (other than living room)	To living room	To garage or carport (with sidewalk)	To garage or carport (with-out sidewalk)	room (other than living room)	To living room	Lot backing onto an arterial	Internal side yards (both sides)	Flankage side yard on corner lot	side yard permitted, yes, no
Example Exam	CODMANDLT	20	20	20	20	35	35	150	65	20	no
15-30 10-30 10-30 10-30 25 25 25 4 + 2* 15-25 15-30 10-3	3 5	22	25	25	25	25	25	25	2	10	no
25 25 26 4 4 + 2 4 4 10 (carport) 10 (carport) 25 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2 1		15-30	10-30	10-30	25	35	25	+	15-25	no
25 25 cr 40 4 + 2 25 cr building street town-street town-bouse 50 25 cr 40 2 25 cr 40 1 to cotal (one by-law bouse 50 25 cr 40) 25 cr 40 20 20 20 20 20 20 20 20 20 20 20 20 20	HAMILION		20	20 (garage) 10 (carport)	20 (garage) 10 (carport)	25	25	25	4	4	permitted in some instances
25 25 25 25 20 20 height of building 50 addit to be less than 4) 8 8 8 20 20 20 35 single 35 single 35 single 30 addit depth	員		25	25	25	single/semi 25 street town- house 50	2 5		+	25 or building line of By-lat	
Solution	Z	25	25	25	25	20	20	20	10 total (one side yard not be less than		nô
25 25 25 25 25 25 25 25		œ	œ	20		height of b	nilding	50 addi- tional lot depth	10 & 4 + 2*	12	yes with design approval
20 20 20 35 single 35 single 50 semi attached 30 semi attached 31 semi 30 semi	5	25	25	25		25	25	09	+	10-15	ou
15 20 25 25 90 4+2 15 no attached garage 20 20 35 35 35 10 one side if no attached garage 10 one side if no attached garage		50	20	20	20				8 & 4 3 & 4 with attached garage or carport	15	Ou
20 20 35 35 4+2* 10 one side if no attached garage	A	ALLS 15	15	20	20	25	25	06	4 + 2 8 one side if no attached garage		yes
	BA		20	20	20	35	35	35			Ĉ.

For each floor or partial floor above first.

Zero	side yard permitted, yes, no	OU	ou ((yes	ou	ou	no	ou	yes	ou	ou	Оп	yes with controls	yes	yes in specific projects
Side Yard (ft.)	Flankage side yard on corner lot	12	15 (no garage closer than 10)	10	10	15	20	19-1 storey 21-2 storey	10-12	15	12	25	20	15	5&8-5 each side with garage
Side	Internal side yards (both sides)	4 & 8 (4 & 4 with attached garage - min. 10 between buildings)	R1 - 6 + 2* R2 - 6 + 4*	4 + 2*	4 + 2*	4 + 2*	8 & 4 single 8 & 8 semi	10 & 4 + 2*	3 + 2* 1 with garage	4 + 2*	10 & 4 + 2*	5 with garage	3 - 5 + 2*	4 + 2*	5&8-5 each side with attached
	Lot backing onto an arterial	65	25	65 (50 with noise abatement)	1	25	25	35	125-86 R.O.W. 150-78 R.O.W.	35	25	25	150	65	150+
Rear Yard (ft.)	To living room	25	25	25	25	25	25	35	I	25	25	25	20-35	35	35
	To habitable room (other than living room)	25	25	25	25	25	25	35	25	25-single 35-townhouse	25	25	20–35	35	35
	To garage or carport (with- out sidewalk)	18	25 20	20	25	20	20	25	20	15	25	25	20–35	20	. 20
Front Yard (ft.)	To garage or carport (with sidewalk)	18	25	20	25	20	20	25	20	15	25	25	20-35	20	20
Front	To living room	25	25	20	25	20	20	25	20	20	25	ر بر	20-35	15	20
	To habitable room (other than living room)	25	R1 25		25	NFS 20	20	25	1 20	20	25	2, C	20–35	75	50
	HAD	OAKVILLE	ORILLIA	OSHAWA	RICHMOND HTT.I.	ST. CATHARINES 20	SARNIA	SAULT STE.	SCARBOROUGH	SUDBURY	CHIMATING	CHILITA	WATERLOO	WHITHEN	WINDSOR

* For each floor or partial floor above the first.

TABLE 3

SITE PLANNING STANDARDS - EXISTING 'INNOVATIVE' DEVELOPMENTS

(A) MAJOR REDUCTIONS

Brampton - Village of Central Park

single family detached - 30' x 80'

- reduced setbacks

- zero lot line

Status - 2000 units completed or under construction.

Cambridge - Freure Homes Ltd.

single family detached - 35' frontage - 10 u.p.a.

- reduced setbacks

- zero lot line

Status - 28 units completed

- 53 units final approved.

Chatham - Merritville Acres

Churchill Park Phase I

single family detached - 35' frontage x 2400 sq.ft.

- reduced setbacks by site

plan review

- zero lot line

Status - 125 units completed or under construction.

Etobicoke - Etobicoke North

single family detached - 35' x 85'

semi detached - 23' x 85'

link unit - 21' x 80'

street townhouse - 21' x 85'

- reduced setbacks

- zero lot line

Status - 280 units completed or under construction.

Hamilton - Mohawk Gardens

single family detached - 25' x 100'

semi detached - 25' x 100'

- reduced setbacks

- zero lot line

Status - 92 units completed or under construction.

London - Ronleigh, O.H.C., Westmount VI, Ronto,

Captain Development, Jocklin

single family detached - 30' x 100'

semi detached - 30' x 100'

street townhouse - 20' - 22' x 100'

- reduced setbacks

- zero lot line

Status - 257 units completed or under construction.

- Heritage Niagara Falls single family detached - 40' x 80' semi detached - 28' x 90' street townhouse - 20' frontage x 2000 sq.ft. - reduced setbacks Status - 329 units completed or under construction. - Bradley Farm South Whitby single family detached - 30' x 100' - reduced setbacks - zero lot line Status - 99 units completed or under construction. - Villages of Riverside Windsor single family detached - 35' x 65' Status - 900 units completed or under construction. MINOR REDUCTIONS Brantford - single family detached - 40' frontage x 4000 sq.ft. semi detached - 30' frontage x 300 sq.ft. street townhouse - 20' x 100' - reduced front and rear yard setbacks Status - Under construction. - By-law #109, 1974 Gloucester single family detached - 45' x 100' semi detached - 32.5' x 100' street townhouse - 30' x 100' Status - Final approved. Kingston - Mowat Woods single family detached - 45' frontage x 4500 sq.ft. semi detached - 22.5' frontage x 3000 sq.ft. - reduced front yard setbacks Status - Completed. Niagara - Charnwood Falls single family detached - 40' x 100' semi detached - 30' x 100' - reduced side yard - zero lot line Status - Final approved. Oakville - Anpam single family detached - 42.4' x 100'

Status - Final approved.

- reduced setbacks

(B)

Windsor - Forest Glade

single family detached - 40' x 120'

- reduced setbacks

Status - Under construction.

Nepean - Greenhaven, Knollsbrook, Bridlewood, Tartan,

Gulf

single family detached - 55' x 100'

semi detached - 32.5' x 100'

street townhouse - 25' x 100'

Status - Completed or under construction.

In addition, 7 municipalities (21%) indicated that they had permitted or approved subdivisions with minor reductions in lot sizes and setbacks. These included 2 municipalities which also had permitted subdivisions with major reductions.

In all, 15 of the 33 municipalities responding to the questionnaire (45%) indicated that they had or were permitting reduced standards of a major and/or minor nature.

(C) Proposed Innovative Site Planning Standards

This portion of the questionnaire was concerned with determining the trends among municipalities towards reduced standards. The responses received were oriented more to general changes to existing standards and by-laws rather than to specific proposed subdivisions.

The responses to this section of the questionnaire are contained in Table 4 and include the key site planning features being considered, as well as the status of the proposals. In most cases, "status" refers to the source of the initiative for proposing the use of reduced standards. As in the previous section, the responses could be divided into major and minor changes.

In all, 7 municipalities (21%) indicated that they were considering <u>major</u> changes to lot size and setback requirements. All but one of these involves the use of the zero lot line concept. Three of these municipalities have already permitted reduced standards subdivisions.

Seven municipalities indicated that they were considering minor changes to site planning standards. These include 2 which are also considering major changes to these standards.

In all, 12 (36%) of the municipalities responding to the survey indicated that they were considering major and/or minor reductions to their current site planning standards. There is, however, no indication, except in 2 cases, whether these changes are in respect to specific developments or general changes.

TABLE 4 PROPOSED 'INNOVATIVE' SITE PLANNING STANDARDS

(A) MAJOR REDUCTIONS

Brantford - single detached - 30' frontage; 3000 sg.ft.

semi detached - 30' frontage; 1000 sq.ft.

street townhouse - 20' frontage; 1000 sq.ft.

- reduced setbacks

Status - Staff proposals.

Burlington - single detached - 30' x 100'

Status - Applications by developers.

Hamilton - single detached - 30' x 100'

semi detached - 30' x 100'

link unit - 30' x 100'

street townhouse - 20' x 100'

- zero lot line

Status - Devised in response to large number of zero lot line proposals by developers.

Kitchener - single detached - 30' x 100'

semi detached - 30' x 100'

- zero lot line

Status - Response to private sector initiative.

London - single detached - 30' x 85'

semi detached - 28' x 85'

link unit - 30' x 85'

street townhouse - 20' x 100'

- reduced setbacks

- zero lot line

Status - Tabled by Committee of Council pending

U.D.I. and H.U.D.A.C. response.

Oshawa - single detached - 30' frontage; 2400 sq.ft.

semi detached - 26' frontage; 2080 sq.ft.

street townhouse - 18' frontage; 1440 sq.ft.

- reduced setbacks

- zero lot line

Status - Revisions have been going on for several years as a result of increase in land prices, senior government legislation and Official Plan regulations.

(B)

```
- single detached - 30' x 100'
Waterloo
                 semi detached - 25' x 100'
                     link unit - 30' x 100'
              street townhouse - 20' x 100'
                               - reduced setbacks
                               - zero lot line
              Status - Proposed but have no status to date.
MINOR REDUCTIONS
Belleville - single detached - 40' x 100'
                               - reduced setbacks
              Status - Proposed by developer.
            - single detached - 40' x 100'
Chatham
                 semi detached - 30' x 100'
              street townhouse - 120 ft. depth; 2500 sq.ft.
                               - reduced setbacks
              Status - Proposed standards to be in new
                       zoning by-law.
            - single detached - 40' x 100'
Cornwall
                 semi detached - 25' x 100'
                     link unit - 30' x 100'
              street townhouse - 26' frontage'; 2000 sq.ft.
                               - reduced setbacks
              Status - To be presented to Planning Board
                       and Council (1978).
Markham (Cedarland Properties)
               single detached - 40' x 100'
                 semi detached - 25' x 100'
              street townhouse - 20' x 100'
                               - reduced setbacks
              Status - Draft approved.
Niagara Falls (Miesels)
               single detached - 40' x 100'
                 semi detached - 25' x 100'
                               - reduced setbacks
              Status - Council approved.
Sault Ste.
            - single detached - 40' x 115'
Marie
                 semi detached - 30' x 115'
                link townhouse - 32' x 115'
              street townhouse - 32' x 115'
                               - reduced setbacks
```

Status - Standards accepted by Council and will

apply in new proposed subdivisions.

Vaughan - single detached - 40' frontage; 4000 sq.ft.

semi detached - 30' frontage; 3000 sg.ft.

link unit - 25' frontage; 2500 sg.ft.

street townhouse - 20' frontage; 2000 sq.ft.

- reduced setbacks

- zero lot line

Status - To be incorporated into new composite zoning by-law.

Windsor - single detached - 40' x 100'

- reduced setbacks

Status - To be used in infilling situations only.

(D) Summary

Based on the returned questionnaires, it would appear that there has been a significant trend towards adopting reduced site planning standards in new subdivision developments across the province. If municipalities which have either permitted or are considering major reductions in site planning standards are lumped together then 15 municipalities or 45% have taken positive steps towards changing their site planning standards. If municipalities which have also either permitted or are considering minor standards changes are included, 23 municipalities or 70% of those surveyed have made some attempt at reducing site planning standards.

There is no doubt that the awareness of reduced site planning standards as proposed in the Urban Development Standards study is high among municipalities. Although no accurate count of the number of housing units involved was made as part of the Survey, a rough estimate was made to get some idea of the extent to which this type of housing has been accepted in the province. Approximately 4,100 units have been built or are under construction in the province.

IV ANALYSIS OF ENGINEERING STANDARDS USER SURVEY DATA

(A) Existing Conventional Engineering Standards

This portion of the Survey was concerned with determining the existing engineering standards that are being applied in each municipality to the majority of new subdivisions. In some cases, a variation in standards is shown, as different requirements may be applied within the same municipality. This also includes "innovative" standards as proposed in the Urban Development Standards study because, unlike "innovative" site planning standards which can be tried out on individual projects, engineering services are highly integrated and therefore changes tend to be "across the board" rather than isolated to a single development.

This section, for evaluation purposes, is divided into 3 categories which describe the major engineering cost saving areas identified in the Urban Development Standards study. These are: Standards, Service Connections, and Road Allowance Widths.

(i) Storm Drainage Standards

The Urban Development Standards study proposed a storm drainage system which elimates a gravity storm drain connection from the house to the storm sewer by discharging roof drains to the ground and by having weeping tile flows directed to a sump and pumped to the ground.

The basic feature of the system is the elimination of the gravity storm sewer connection. In evaluating the systems used in the various municipalities, the key "innovative" feature looked for was the elimination of the gravity storm connection and the method by which this was achieved. This meant determining the method of roof drain and weeping tile discharge.

The Survey results indicate that there is a wide variation in the methods of individual site storm drainage among municipalities. No one system appears to dominate. The results of this part of the questionnaire are contained in Table 5.

Of the 33 municipalities responding to the

engineering standards questionnaire, 17 (52%) indicated that they discharged roof drains to the ground, 9 (27%) discharged to the storm sewer, and the remaining 7 (21%) indicated that they used both systems.

For weeping tile drainage, there is a wide variation of techniques used among municipalities. Of the various systems used, 4 (12%) municipalities indicated they drained weeping tiles by a sump pump system discharging to the ground, 4 (12%) used a sump pump system connected directly to the storm sewer, 10 (30%) indicated they used a gravity connection to the storm sewer, 8 (24%) connected to the sanitary sewer and the remaining 7 (21%) used a variety of these systems.

It appears from the results of the Survey that current practice in the province is split fairly evenly between those municipalities which use a gravity storm sewer connection for individual unit drainage and those which utilize a variety of systems to eliminate the gravity connection.

(ii) Service Connections

This part of the Survey was concerned with the method of connecting water and sanitary services to individual lots. The Urban Development Standards study proposed that these services be "dualed", i.e., one lateral serving two units and, furthermore, that these laterals be placed in a common trench. The results of this part of the questionnaire are contained in Table 6. It should be noted that Table 6 also includes a column on common trenching for storm and sanitary laterals as this is often practiced in municipalities where there is a storm sewer connection.

Of the 33 municipalities responding to the Survey, 5 dualed both water and sanitary services, 3 indicated that they dualed only the sanitary service, 2 dualed both only for semi's and one dualed sanitary services only for semi's. The remaining 22 (67%) did not permit any sort of dualing.

The use of a common trench for the various service laterals is much more widely practiced. Nineteen municipalities indicated that they placed water and sanitary laterals in a common trench. Where municipalities allow a storm connection, 17 indicated that they placed sanitary and

storm laterals in a common trench. Eleven municipalities permitted both systems. One municipality placed water, sanitary and storm laterals in a common trench and one municipality had the storm and water lateral in a common trench.

Overall, it appears that the practice of "dualing" is not widely accepted with 67% of the municipalities responding to the Survey indicating that they do not allow any form of twin connections. On the other hand, the use of a common trench for various service laterals is widely practiced with only 8 (24%) municipalities indicating that they did not use a common trench at all.

(iii) Road Allowance Widths

This part of the questionnaire was concerned with municipal standards for local and collector streets in new subdivisions. Of greatest interest was any reduction from the standard 66 foot road allowance width for local roads. The Urban Development Standards study proposed a broad classification of road widths according to the actual function of the road. The results of the Survey are contained in Table 7.

A total of 11 (33%) municipalities indicated that they permit road allowance widths less than 66 feet for local roads. In some cases, these were only reductions for short cul-de-sacs, although 6 indicated reductions for all local roads within certain classifications. However, the 66 foot road allowance width remains by far the standard for the majority of municipalities.

For collector roads, the responses to the questionnaire varied so greatly that no generalizations can be made. The responses as received, however, are included in Table 7 for information purposes.

(B) Existing 'Innovative' Developments

This section of the questionnaire was concerned with obtaining a list of existing subdivision developments which employ engineering standards that were reduced or different from the conventional standards of the municipality concerned. Included in this category are subdivisions which are already completed, under

construction or have received final approval.

Since the category of Existing "Conventional"
Engineering Standards also included "innovative" standards, particularly with respect to the storm design,
"dualing" and common trench servicing practices, it
was not deemed necessary to analyze this part of the
questionnaire. However, the responses to the Existing
"Innovative" Engineering Standards section of the
questionnaire have been included in Table 8 for information purposes.

(C) Proposed 'Innovative' Engineering Standards

The results of this part of the Survey are summarized in Table 9. The Table is arranged under the three key engineering cost saving areas, i.e., Storm Drainage Standards, Service Connections and Road Allowance Widths. The information given in Table 9 is generalized from individual responses and therefore caution must be used in interpreting the data. The Table also indicates the "status" of the proposals.

(i) Storm Drainage Standards

The "innovation" that was looked for was the elimination of the gravity storm sewer connection. Five municipalities now utilizing a gravity storm sewer connection indicated that they were proposing the elimination of the storm connection. This would either be done through the use of a sump pump system, the use of a "third" pipe to drain foundation drains, or by connection to the sanitary sewer.

If municipalities which are currently using the "innovative" storm design system are combined with those that are proposing to use it, it would appear that the majority of responding municipalities will be using a system similar to that proposed in the Urban Development Standards study.

(ii) Service Connections

Only 3 municipalities indicated that they were considering "dualing" water and/or sanitary connections to individual lots. Overall, it does not appear that there

is a significant movement toward adopting this concept among the surveyed municipalities.

(iii) Road Allowance Widths

The greatest amount of proposed changes are in this area. A total of 11 (33%) municipalities are proposing standard reductions to road allowance widths for local and collector roads. These include several municipalities which have already allowed reduced road allowances in specific subdivisions.

It would appear that there is a significant movement in this area towards using reduced road allowance widths below 66 feet for local roads. However, as in the case of site planning standards, many of these reductions would be for specific subdivisions only and the full effect of such changes is therefore not known.

(D) Summary

It is difficult to summarize the results of the engineering standards part of the Survey since many municipalities use various design criteria within their boundaries. Also, as in the case of the site planning standards, reductions in certain standards, most specifically road allowances, are only done in isolated cases and the full effect of such a reduction is not known.

It does appear, however, that as is the case for site planning standards, most municipal engineering departments are highly aware of the concept of reduced and modified engineering standards as proposed in the Urban Development Standards study. Also, in the key area of storm drainage standards, a majority of the responding municipalities are currently using or are considering systems along similar lines to that proposed in the study.

The situation is not as clear for road allowance standards. Although approximately 57% of municipalities indicated that they have previously permitted or are considering reductions in road allowance widths to some extent, generally there remains a considerable resistance to many to any change below 66 feet.

In the area of service connections, a large majority of municipalities are opposed to the use of the dualing concept. However, the use of a common trench for various service laterals is widely used.

EXISTING CONVENTIONAL ENGINEERING STANDARDS STORM DRAINAGE STANDARDS

						Run	Run-off Coefficient	ficient
			Design	Storm	Initial		Li	Link or Street
	Root Drain Discharge	Foundation Drain Discharge	Minor	Major	Entry Time	Detached	Semi	Townhouse
URBAN DEVELOP- T MENT STANDARDS*	To ground.	Pumped to ground.	2 yr.	25 yrs.	Calculated to reflect actual design situation	to 0.60	09.0	0.65
Thomas	To around	Pumped to ground.	5 yr.		15 min.	0.40	09.0	09.0
BELLEVILLE		Pumped to ground or to storm sewer.	5 yr.	ì	15 min.	0.30-0.40 0.30-0.40	0.30-0.40	0.40
BRANTFORD	To ground.	To sump if high water table. Sump can be pumped to ground or storm sewer if available. Gravity connections are	5 yr.	1	15 min.	0.40	0.40	1
		Dismood +0 around	5 vr.	50 yrs.	Calculated	0.40-0.45	0.40 - 0.45	0.60-0.70
BURLINGTON		Tumped to dround		¹	5 min.	0.25	0.25	0.35
CAMBRIDGE	To ground.	To sump and where hecessary pumped to storm sewer.						(
CHATHAM	To storm	To sump and pumped to storm	5 yr.	5-25 yrs.	20 min.	(impervious 0.90	6.0	6.0
	sewer.	sewer.			16) 15)	grass, etc.)0.20	0.2	0.1
GLOUCESTER	To ground or	Gravity connection to storm	5 yr.	ŧ	20 min.	0.30	0.30	0.50
GUELPH	To ground or	Gravity connection to storm	5 yr.	1	15 min.	0.45	09.0	0.70
	Storm sewer.	E Constant and a coupt	5 Vr.	ı	15 min.	0.40	0.50	0.70
KITCHENEK	To ground or storm sewer.	וס ממודרמון מלאני.				U 9	C	ני
KINGSTON	To ground or storm sewer.	Gravity connection to storm sower.	2 yr.	ı	15 min.	0.40	00.0	0
LONDON	To ground or storm sewer.	To sanitary sewer.	2 yr.	t	8-19 min.	0.50-0.55	0.55	ą

* (Ref: Exhibit 2.1 Urban Development Standards)

				1 ()	7 + 	Run	Run-off Coe	Coefficient
	Roof Drain Discharge	Foundation Drain Discharge	Minor	Major	Entry Time	Detached	Semi	Townhouse
MARKHAM	To storm sewer.	Gravity connection to storm sewer.	2 yr.	25 yr.	5 min.	0.50	0.50	0.50-0.60
MILTON	To storm sewer.	Gravity connection to storm sewer.	2 yr.	1	7 min.	0.45	0.45	09.0
MISSISSAUGA	To storm sewer.	Gravity connection to storm sewer.	10 yr.	Regional storm.	15 min.	0.40	0.40	0.45
NEPEAN	To ground.	Gravity connection to storm sewer.	5 yr.	ı	15-20 min.	0.25-0.40	0.25-0.40	10 0.25-0.40
NIAGARA FALLS	To ground & rear yard catchbasin or swales.	To sanitary sewer.	5 yr.	ı	5-10 min.	0.40	0.40	0.50
NORTH BAY	To storm sewer or open ditch.	To storm sewer or open ditch.	2 yr.	1	20 min.	0.35	0.40	0.45-0.50
OAKVILLE	To storm sewer.	Gravity connection to storm sewer.	10 yr.	1	15 min.	0.40	0.45	0.60
ORILLIA	To ground.	Pumped to ground.	2 yr.	25 yr.	10 min.	0.45	0.45	0.45
OSHAWA	To ground.	To sanitary sewer.	l yr.	yes	10 min.	0.45	0.45	0.65
PETERBOROUGH	To ground.	To sanitary sewer.	5 yr.	ı	20 min.	0.34-0.50	0.34-0.	50 0.34-0.50
RICHMOND HILL	1. To storm sewer. 2. To ground if no storm sewer.	1. Gravity connection to storm sewer. 2. Pumped to ground if no storm sewer.	5 yr.	50 yr.	15 min.	0.50	0.50	0.65
ST. CATHARINES	3 To storm sewer.	Gravity connection to storm sewer or sanitary sewer.	5 yr.	25 yr.	10 min.	0.40	0.45	0.50
ST. THOMAS	To ground.	To sanitary sewer.	2 yr.	1	5 min.	0.50	0.55	09.0
SARNIA	To ground.	Pumped to storm sewer.	1-2 yr.	ı	5-15 min.	0.45	0.45	09.0
SAULT ST.	To ground.	Sump pump or gravity con- nection to storm sewer.	10 yr.	1	10 min.	0.30	0.35	0.50
THUNDER BAY	To ground.	To storm sewer or pumped to ground.	2-5 yr.	25 yr.	20 min.	0.30	0.30-0.40	40 0.40-0.50

						Run-	off Coe	Run-off Coefficient
	Roof Drain	Foundation Drain Discharge	Design Storm Minor Major	torm	Initial Entry Time	Link or Str Detached Semi Townhouse	Semi	Link or Street Townhouse
TIMMINS	To ground.	Gravity connection to storm	5 yr.	ı	10 min.	0.50	0.50	ı
VAUGHAN	To storm	Gravity connection to storm	5 yr.	1	7 min. or calculated	0.40-0.70 0.70	0.70	0.75
	Sewer.	ひにゅくと ひこと ひこと ひこと ひこと ひこと ひこと ひこと ひこと ひこと ひこ	5 Vr.	5-25 yr.	10 min.	0.40-0.45	.45-0.5	0.40-0.45 0.45-0.50 0.50-0.60
WATERLOO	To ground.	To sanitary sewer.		1	10 min.	0.40	0.50	09.0
WELLAND	To storm	Gravity connection to storm		100 yr.	10 min.	0.45	0.55	0.65
	sewer.	sewer.				(9	
WINDSOR	To storm	To sanitary sewer.	5 yr.	1	20 min.	0.40	0.40	00.0

EXISTING CONVENTIONAL ENGINEERING STANDARDS SERVICE CONNECTIONS

I																water, sanitary & storm in common trench.		
Other											ø					water, storm i trench.		
Trench Sanitary & Storm	N/A*	N/A	Yes	Yes	Yes	N/A	yes	Yes	Yes	yes	yes (where possible)	N/A	yes	yes	yes	i	N/A	yes
Water & Sanitary	Yes	no	yes	Yes	no	Yes	yes	Yes	yes	Yes	yes (where possible)	no	no	no	no	1	ou	Yes
Dualing r Sanitary	Yes	no	no	no	no	Yes	yes	no	yes (semi- detached only)	no	Yes	no	no	no	yes	no	no	no
Mater	Yes	no	no	no	ou	yes	yes	no	no	no	Yes	no	no	no	no	no	no	no
	URBAN DEVELOPMENT STANDARDS **	BARRIE	BELLEVILLE	BRANTFORD	BURLINGTON	CAMBRIDGE	СНАТНАМ	GLOUCESTER	GUELPH	KITCHENER	KINGSTON	LONDON	MARKHAM	MILTON	MISSISSAUGA	NEPEAN	NIAGARA FALLS	NORTH BAY

^{*}N/A - Not applicable. **(Ref: Exhibit 2.3 Urban Development Standards)

OAKVILLE	ou	ou	no	no	storm & water in common trench.
KT T T T T T C C	no	no	yes	N/A*	
OKILLIA		no	yes	N/A	
USHAWA DEMEDBOROTIGH		no	no	N/A	
RICHMOND HILL		no	no	yes	
NEW CATHARINES	no	no	yes	no	
ST. THOMAS	no	no	Yes	N/A	
SARNIA	no	no	Yes	yes	
SAULT STE. MARIE	no	yes	yes	no	
ER BAY	yes	Yes	yes	yes	
	(semi ached y)	yes (semi detached only)	yes(semi detached only)	Yes	
VAUGHAN	yes (semi detached only)	yes(semi detached only)	Yes	yes	
WATERLOO		ou	yes	N/A	
WELLAND	no	no	no	N/N	
WHITBY	no	no	no	no	
WINDSOR	ou	yes	no	no	

Other

Water & Sanitary Sanitary & Storm

Dualing Water Sanitary

*N/A - Not applicable.

EXISTING CONVENTIONAL ENGINEERING STANDARDS ROAD ALLOWANCE WIDTHS

		Local Roads		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Collector Roads	ads Darromont Widths	
	No. of Units	R.O.W.	Pavement Widths	NO. OI UNITS	P. C. W.	ravement market	1
URBAN DEVELOPMENT STANDARDS **	0-100 (Crescent, P-loop, Cul-de-	. 204	\$ \$ \$	150-350 (Minor)	199	2 8 4	
	sac) 0-150 (Local)	56'	28'	350-450 (Neighbourhood)	704	32 1	
				450+ (Collector)	80.	421	
BARRIE		,99	28'	1	199	32"	
BELLEVILLE	ŧ	661	29"	ı	199	291	
BRANTFORD	0-100	,09	28 "	100+	, 99	30 1	
BITRI, TNGTON	N/A**	,99	28 "	1	198-199	32'-46'	
CAMBRIDGE	. 1	,99	28"	ı	, 99	28'	
CHATHAM	0-200	199	28,	ı	83 1	331	
CHAILMA	N/A	60	28'	1	, 99	28"	
GLOOCES LEIN	: 1	199	28'	ı	86	32'	
GOELER	1	. C	170	I	199	34"	
KITCHENER	+09	50.	30) >		
KINGSTON	ŀ	199	28"	ı	861	32"	
LONDON	Cul-de-sacs 0-60 (other than	60° an 62°	221	ŧ	70,	32 4	
	cul-de-sacs)	199	28'				
MARKHAM	ı	. 591	281	ł	194	42,	
MILTON	ı	.99	281	ı	861	38,	
MISSISSAUGA	ı	,99	28 "	ı	86	26"	
NEPEAN	ı	199-109	28"	1	80,-86,	36 °	

* 24' for cul-de-sacs less than 350' long and with less than 40 units.

^{**}N/A - Not applicable.

^{*** (}Ref: Exhibit 2.5 Urban Development Standards)

		からつび ドッカンド			Collector Roads	Spi	
	Me of Imite	B O. W.	Pavement Widths	No. of Units	R.O.W.	Pavement Widths	
	NO. OI OILES					4	
		66 4	000	1	.94-,99	361	
NIAGARA FALLS	ŝ		· (I	199	ል ቅ	
VAG HEGON	8	, 99	. 87	ı)	4	
NOVID DAT	מכי	561	22'	100+	,98-,99	30,	
OAKVILLE	25-100	09	24'	1	i	ı	
		661	284	ı	199	32"	
ORILLIA	ı	00		1	198-199	321	
OSHAWA	ŧ	, 99	. 87			200	
	1	199	28 4	ı	. 92	20	
PETERBOROUGH	C L	8 2 2	284	150-350	198	321	
RICHMOND HILL	0-150	00		1	861	46"-48"	
ST. CATHARINES	1	,99	2007		- C	ı	
	1	,99	281	ı	16.	1	
ST. THOMAS			-00	1	199	361	
SARNIA	ı	. 99	000	C LL r	661	36"	
SAULT STE. MARIE	0-150	60' or 66'	28.	005-00T		0	
	ı	, 99	321	ì	80100.	40:-50:	
THUNDER BAX			000	ı	, 99	30.	
TIMMINS	1	. 00	0 0	ı	86	36*	
NAHUHAN	1	199	288	ı	0 (200	
		601	30.	1	99	. 95	
WATERLOO	1		201	ı	, 99	321	
WELLAND	1	. 00	0 0	Î	.98-,99	281-321	
WHITBY	1	199	. 87	C L	66.1	000	
WINDSOR	0-80	50 0	24	005-00T			

TABLE 8

ENGINEERING STANDARDS - EXISTING 'INNOVATIVE' DEVELOPMENTS

(A) STORM DESIGN SYSTEM

KINGSTON

Mowat Woods - roof drains to ground

- foundation drains pumped to ground

Status - Under construction.

(B) SERVICE CONNECTIONS

WINDSOR

Villages of Riverside - water dualed

- sanitary dualed

- sanitary and storm in common trench

Status - Completed and under construction.

(C) ROAD ALLOWANCES

KINGSTON

Mowat Woods - Local Roads - 50' R.O.W.

26' pavement

Status - Completed.

Wycliffe - Local Roads - 60' R.O.W.

- 26' pavement

Status - Under construction.

MILTON

Brian Crescent - Local Roads - 50' R.O.W.

- 28' pavement

Status - Under construction.

NIAGARA FALLS

Heritage Homesteads - Local Roads - 50' R.O.W.

- 24' pavement

- Collector Roads - 66' R.O.W.

- 28' pavement

Status - Completed.

WATERLOO - Local Roads - 0-20 units

- 50' R.O.W.

- 28' pavement

WINDSOR

Villages of Riverside - Local Roads - 0-100 units

- 52' R.O.W.

- 24' pavement

Status - Completed and under construction.

TABLE 9

PROPOSED 'INNOVATIVE' ENGINEERING STANDARDS

(A) STORM DESIGN SYSTEM

CAMBRIDGE

- roof drains to ground
- foundation drains to dry well
- minor system 10 year return
- consideration being given to zero increase in run-off

GLOUCESTER

- roof drains to ground
- foundation drains to sanitary sewer

MARKHAM

- roof drains to ground
- foundation drains to storm sewer or sump pump to ground
- minor system 2 year return
- major system 25 year return

SAULT STE. MARIE

- roof drains to ground
- foundation drains by sump pump to ground
- minor system 10 year return
- major system 100 year return

VAUGHAN

- roof drains to ground
- foundation drains to "3rd pipe"
- minor storm 2 yr. return if no foundation connections- 5 yr. return otherwise
- major system 25 year return; house elevations checked for Hazel storm

(B) SERVICE CONNECTIONS

OAKVILLE

- water single service
- sanitary dual service
- sanitary and storm in common trench

VAUGHAN

- water dual service
- sanitary dual service
- water and sanitary in common trench
- sanitary and storm in common trench

WINDSOR

- water single service
- sanitary dual service

(C)

ROAD ALLOWANCES	
CAMBRIDGE	- Local Roads - 56' R.O.W.
	- 26' pavement
	- Collector Roads - 60' R.O.W.
	- 30' pavement
GLOUCESTER	- Local Roads - 50' R.O.W.
	- 24' pavement
MARKHAM	- Local Roads - 59' R.O.W.
	- 28' pavement
	- Collector Roads - 76' R.O.W.
	- 42' pavement
MILTON	- Local Roads - 61' R.O.W.
	- 28' pavement
	- Collector Roads - 86' R.O.W.
	- 38' pavement
MISSISSAUGA	- Local Roads - 56' R.O.W.
	- 28' pavement
OAKVILLE	- Local Roads - 57' R.O.W.
	(0-100 units - 28' pavement
	- Collector Roads - 66'-82' R.O.W.
	(100 + units) - 30' pavement
PETERBOROUGH	
Maple Ridge Subdivision	- Local Roads - 57' R.O.W.
	- 28' pavement
	- Collector Roads - 70' R.O.W.
	(some) - 32' pavement
SAULT STE. MARIE	- Local Roads - 56' R.O.W.
	(0-150 units) - 28' pavement
	- Collector Roads - 66' R.O.W.
	(150 + units) - 28'-36' pavement
VAUGHAN	- Local Roads - no sidewalk - 52' R.O.W.
	- 1 sidewalk - 57' R.O.W.
	- 2 sidewalks - 62' R.O.W.
	- 28' pavement
	- Collector Roads - minor - 76' R.O.W.
	- 28' pavement
	- major - 85' R.O.W.
	- 28'-49' pavement
WHITBY	- Local Roads - 60'-66' R.O.W.
	- 28' pavement
	20 pavement

- Collector Roads - 66'-86' R.O.W.

- 28' pavement

W	I	N	D	S	0	R

- Local Roads - 50' R.O.W. (0-80 units) - 24' pavement

- (80 + units) - 66' R.O.W.

- 28' pavement

- Collector Roads - 66' R.O.W. (150-300 units) - 28' pavement

- 37 -

V GENERAL CONCLUSIONS

Although the Survey results are by no means a complete picture of the current and future situation on development standards in the province, several general conclusions are apparent from the analysis of the responses received.

- 1. There is a high awareness among municipalities of the concept of reduced and modified development standards as proposed in the Urban Development Standards study.
- 2. A <u>majority</u> of the municipalities surveyed have already or are currently considering, modifications in some respect to their normal development standards along the lines of those proposed in the Urban Development Standards study.
- 3. Although no accurate count has been made, it is estimated that there are approximately 4,100 units built or under construction in the province which employ major reductions in site planning standards.
- 4. Site planning standards reductions are done mainly on a site by site basis and not as general amendments to zoning by-laws or official plans.
- 5. Engineering standards changes, except for some individual reduction for road allowances in specific developments, are generally done on a municipality-wide basis.
- 6. The use of the "zero-lot line" concept is almost always used in conjunction with major reductions to lot size and lot width standards.
- 7. There appears to be significant use already of storm drainage systems similar to that proposed in the Urban Development Standards study.

- 8. There appears to be a gradual acceptance among municipalities of reduced road allowance widths for local roads, although the full impact of this will not be felt unless municipalities which are considering reductions do so on a municipality-wide basis.
- 9. The concept of "dualing" water and sanitary services to individual lots is not widely used or accepted. However, the use of a common trench for lateral services is widely practiced.



APPENDIX I



Ministry of Housing

Queen's Park
Toronto, Ontario

November 21, 1977.

Dear

Re: Urban Development Standards - A Detailed Site Planning Standards User Survey.

As you probably know, the Ministry of Housing published the report on <u>Urban Development Standards</u> in April 1976. It illustrated how reductions and modifications to certain subdivision design standards could significantly lower housing costs.

Since the publication of the Report, several municipalities have requested examples of subdivision developments using the site planning and engineering standards proposed in the Report. We feel that a compendium of such developments would be useful.

Also, we would like to know if the publication of the Report has influenced municipalities to reduce their site planning and engineering standards.

We have prepared two brief questionnaires which are intended to obtain information related to any recent or proposed subdivision developments in your municipality which employ site planning and engineering standards significantly different from your usual requirements. As well, we would like to know if your municipality has made or is considering any changes to its current site planning and engineering standards as a result of our Report.

We would appreciate you completing the questionnaire on <u>site planning</u> standards. We have requested the City <u>Engineer</u> to complete the engineering standards questionnaire. The questionnaire has been designed so that in most instances simple numbers or brief descriptions should suffice. However, feel free to elaborate if you feel that this is necessary or useful. Reference to the Urban Development Standards report may be helpful in completing the questionnaire.

Since we may publish the results of the Survey so that it may be used as a reference by municipalities as well as other agencies and interested groups concerned with subdivision design, we are assuming that all the information which we receive may be used in this way.

Your reply to the questionnaire by January 16, 1978 would be appreciated. If you have any questions on the questionnaire, please contact either Gary McAlister, Manager, or Frank Martin, Senior Planner, Programs Section at 965-3938.

Thank you for your cooperation.

Yours sincerely,

G. Keith Bain,

Director,

Local Planning Policy Branch.

Encl.

QUESTIONNAIRE

URBAN DEVELOPMENT STANDARDS - A DETAILED SITE PLANNING STANDARDS USER SURVEY

EXISTING "CONVENTIONAL" SITE PLANNING STANDARDS
Please complete the following questions on your municipality's existing basic "conventional" planning standards which are applicable to a majority of new subdivision development.
MINIMUM LOT DIMENSIONS AND AREAS (Reference: Exibit 2.9 URBAN DEVELOPMENT STANDA
FRONTAGE DEPTH AREA
single detached unit
semi-detached unit
link unit (average including wider end lot)
street townhouse unit (average including wider end lot)
MINIMUM YARD DISTANCE (From lot line to dwelling) (Reference: Exibit 2.10 URBAN DEVELOPMENT STANDARDS)
Front Yard
to habitable room(other than living room)
to living room
to garage or carport (with sidewalk)
to garage or carport(without sidewalk)
Rear Yard
to habitable room (other than living room)
to living room
lot backing onto an arterial
Side Yard
internal side vards

(both sides)

•	flankage side yard ona corner lot
6	zero side yard () Permitted () Not Permitted
В.	EXISTING "INNOVATIVE" SITE PLANNING STANDARDS
	Please complete the following questions on your municipality's existing "innovative" planning standards for several subdivision developments which employ reduced planning standards, as compared to your "conventional" subdivision planning standards.
1.	NAME OF SUBDIVISION:
2.	STATUS: () Final Approved () Under Construction Other (Please Specify)
3.	MINIMUM LOT DIMENSIONS AND AREAS
	FRONTAGE DEPTH AREA
•	single detached unit
•	semi-detached unit
e	link unit (average including wider end lot)
•	street townhouse unit (average including wider end lot)
4.	MINIMUM YARD DISTANCE (From lot line to dwelling)
	Front Yard
•	to habitable room (other than living room)
•	to living room
•	to garage or carport (with sidewalk)
•	to garage or carport (without sidewalk)
	Rear Yard
•	to habitable room

room)

	to living room
•	lot backing onto an arterial
	Side Yard
•	internal side yards (both sides)
•	flankage side yard on a corner lot
•	zero side yard () Permitted () Not Permitted
С.	PROPOSED "INNOVATIVE" SITE PLANNING STANDARDS
	Please complete the following questions on your municipality's proposed "innovative" planning standards.
1.	MINIMUM LOT SIZE FRONTAGE DEPTH AREA
•	single detached
	semi-detached unit
•	link unit (average including wider end lot)
•	street townhouse
2.	MINIMUM YARD DISTANCE (From lot line to dwelling)
	Front Yard
	to habitable room (other than living room)
•	to living room
•	to garage or carport (with sidewalk)
•	to garage or carport(without sidewalk)
	Rear Yard
•	to habitable room (other than living room)

•	to living room
•	lot backing onto an arterial
	Side Yard
•	internal side yard (both sides)
•	flankage yard oncorner lot
	Zero side yard () Permitted () Not Permitted
3.	Is your municipality considering these proposed "innovative" planning standards because of our report on Urban Development Standards?
	yes () no ()
	If yes, what is the status of these proposed standards?
	If no please explain

Programs Section October 1977.

APPENDIX II



Ministry of Housing

Queen's Park
Toronto, Ontario

November 21, 1977.

Dear

Re: Urban Development Standards - A Detailed Engineering Standards User Survey.

As you probably know, the Ministry of Housing published the report on <u>Urban Development Standards</u> in April 1976. It illustrated how reductions and modifications in certain subdivision design standards could significantly lower housing costs.

Since the publication of the Report, several municipalities have requested examples of subdivision developments using the site planning and engineering standards proposed in the Report. We feel that a compendium of such developments would be useful.

Also, we would like to know if the publication of the Report has influenced municipalities to reduce their site planning and engineering standards.

We have prepared two brief questionnaires which are intended to obtain information related to any recent or proposed subdivision developments in your municipality which employ site planning and engineering standards significantly different from your usual requirements. As well, we would like to know if your municipality has made or is considering any changes to its current site planning and engineering standards as a result of our Report.

We would appreciate you completing the questionnaire on engineering standards. We have requested the Planning Director to complete the site planning standards questionnaire. The questionnaire has been designed so that in most instances simple numbers or brief descriptions should suffice. However, feel free to elaborate if you feel that this is necessary or useful. Reference to the Urban Development Standards report may be helpful in completing the questionnaire.

Since we may publish the results of the Survey so that it may be used as a reference by municipalities as well as other agencies and interested groups concerned with subdivision design, we are assuming that all the information which we receive may be used in this way.

Your reply to the questionnaire by January 16, 1978 would be appreciated. If you have any questions on the questionnaire, please contact either Gary McAlister, Manager, or Frank Martin, Senior Planner, Programs Section at 965-3938.

Thank you for your cooperation.

Yours sincerely,

G. Keith Bain,

Director,

Local Planning Policy Branch.

Encl.

QUESTIONNAIRE

URBAN DEVELOPMENT STANDARDS - A DETAILED ENGINEERING STANDARDS USER SURVEY

EXIST	ring "Conventional" En	GINEE	RING STANDA	RDS
munio	se complete the follow cipality's existing be neering standards which rity of new subdivision	asic " ch are	conventiona applicable	1"
STORM	M DRAINAGE STANDARDS		ence: Exib	
Туре	of System			
	od of discharging drains			
	od of discharging dation drains			
Desig	gn Criteria			
(a)	Design Storm			
•	sewer (minor system)			
•	<pre>surface overflow (major system), if any</pre>			
•	initial entry time			
(b)	Run-off Coefficients			
•	detached			
•	semi			

	. link and street townhouses		
2.	SERVICE CONNECTIONS (From (Reference: Exibit 2.3 UF	street mains to	lot line) STANDARDS)
	Dualing		
•	water ye	es ()	no ()
•	sanitary ye	es ()	no ()
	Common Trench		
•	water & sanitary ye	es ()	no ()
•	sanitary & storm ye	es ()	no ()
	Other (Please explain)		
3.	ROAD ALLOWANCE WIDTHS (Ref	ference: Exibit VELOPMENT STANDA	
			Pavement Width
•	Local Roads		
	Collector Roads		
В.	EXISTING "INNOVATIVE" ENGIN		
	Please complete the follow municipality's existing "standards for several substantial which employ reduced engineering standards.	innovative" engi: division develop neering standard	neering ments s, as
1.	NAME OF SUBDIVISION:		
2.	STATUS: () Final Approve () Other (Please Specify)	ed () Under Co	nstruction

3.	STOR	M DRAINAGE STANDARDS	
	Туре	of System	
•	methoroof	od of discharging drains	
•	methe	od of discharging dation drains	
	Desi	gn Criteria	
	(a)	Design Storm	
	•	sewer (minor system)	
		surface overflow (major system), if any	
	•	initial entry time	
	(b)	Run-off Coefficients	
	•	detached	
		semi	
	•	link and street townhouses	

4.	SERVICE CONNECTIONS	(Fro	om st	reet	mains to	lot	line)	
	Dualing							
	water		yes	()		no (()	
	sanitary		yes	()		no (()	
	Common Trench							
•	water & sanitary		yes	()		no (()	
•	sanitary & storm		yes	()		no (()	
	Other (Please explain	in)						
5.	ROAD ALLOWANCE WIDTH	HS						
		No.	of t	Jnits	R.O.W.	Pa	vement	Width
•	Local Roads							
•	Collector Roads							
~		-!!				- 0		
C. PROPOSED "INNOVATIVE" ENGINEERING STANDARDS								
	Please complete the municipality's propostandards.							
1.	STORM DRAINAGE STANI	DARDS	5					
	Type of System							
•	method of discharging roof drains	ng	-					
φ	method of discharging foundation drains	ng	-					
	Design Criteria							
	(a) Design Storm							
	. sewer (minor sy	vster	n)					

	٠	surface overflow (major system), if any				
		initial entry time				
	(b)	Run-off Coefficier detached	<u></u>			
	٠	semi				
	•	link and street townhouses				
2.	SERV	ICE CONNECTIONS (FI	com street	mains to	lot line)	
	Dual	ing				
•	wate	r	yes ()		no ()	
•	sani	tary	yes ()		no ()	
	Comm	on Trench				
•	wate	r & sanitary	yes ()		no ()	
٠	sani	tary & storm	yes ()		no ()	
	Othe	r (Please explain)				
3.	ROAD	ALLOWANCE WIDTHS				
		No	of Units	R.O.W.	Pavement	Width
	Loca	l Roads				
	Coll	ector Roads				

4. Is your municipality considering these proposed "innovative" engineering standards because of our report on <u>Urban Development Standards</u>?

yes () no ()

If yes, what is the status of these proposed standards?

If no, please explain.

Programs Section October 1977.





